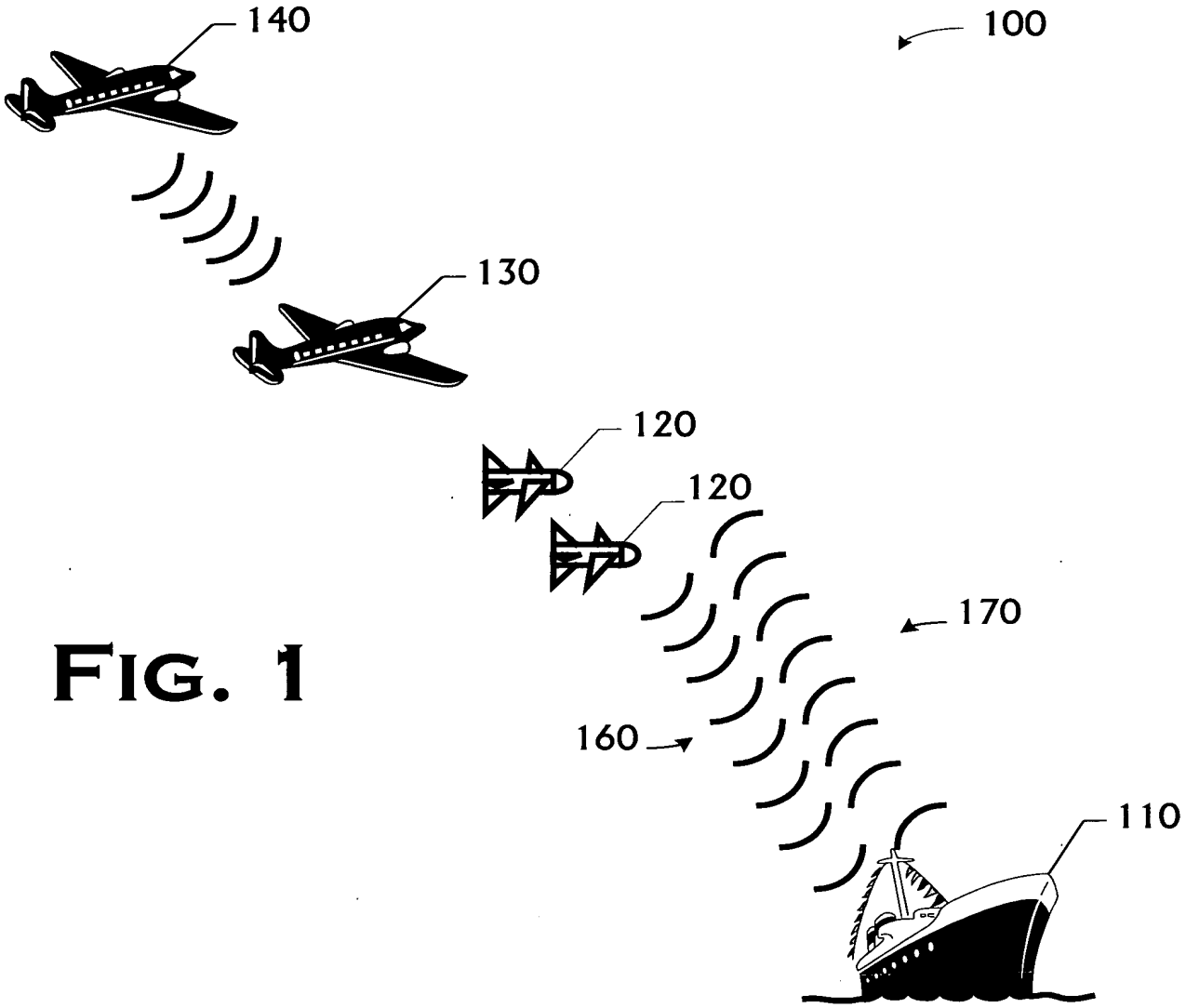

140
100
130
120
120
170
160
110

FIG. 1

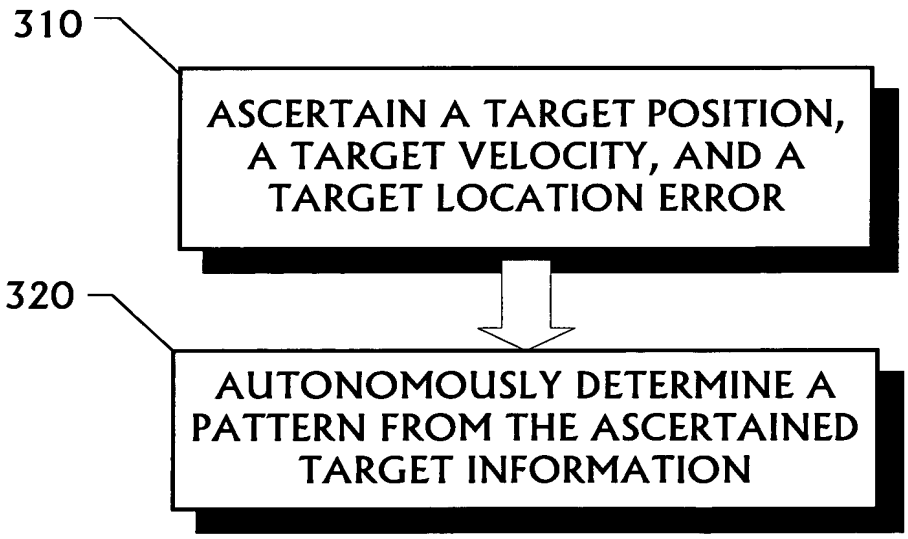

310
ASCERTAIN A TARGET POSITION, A TARGET VELOCITY, AND A TARGET LOCATION ERROR
320
AUTONOMOUSLY DETERMINE A PATTERN FROM THE ASCERTAINED TARGET INFORMATION

FIG. 3

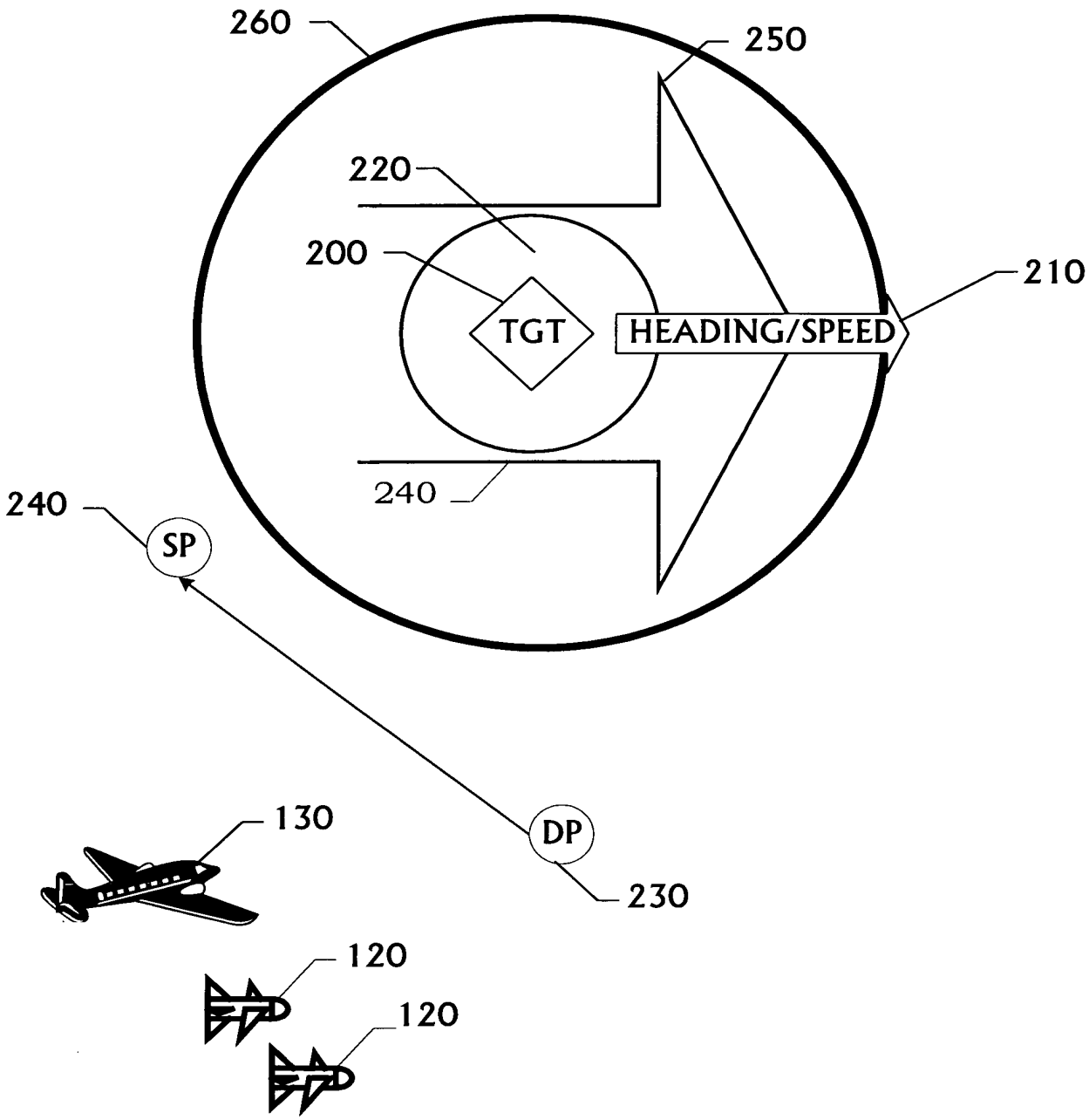

260
250
220
200
210
TGT
HEADING/SPEED
240
240
SP
DP
230
130
120
120

FIG. 2

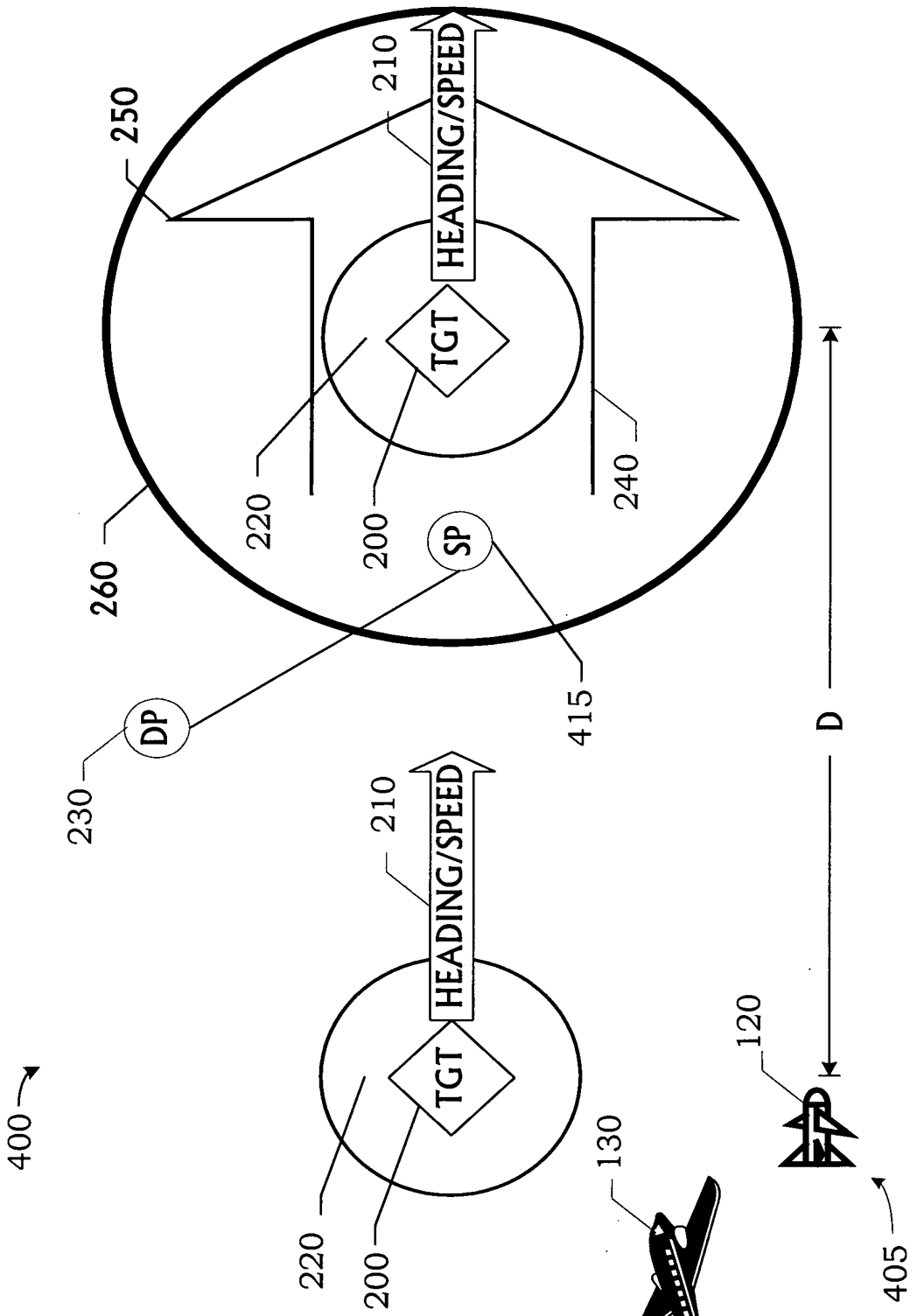
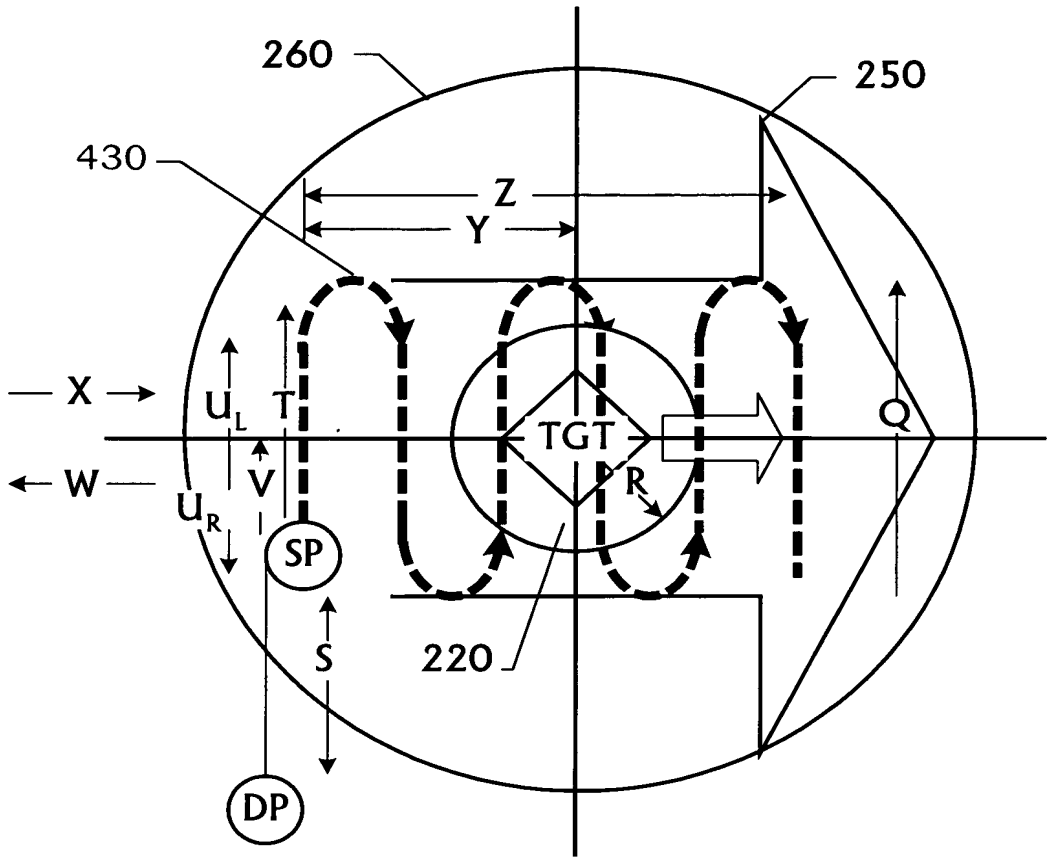
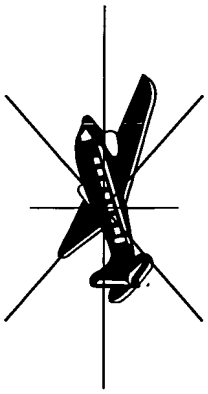

400
250
210
HEADING/SPEED
TGT
220
200
240
260
SP
415
DP
230
D
120
130
405

FIG. 4A





Q - LLMULT * TLE + X
R - TLE
S - DISPENSE OFFSET
T - ORIENTATION
U_L - LEFT SIDE HEADING
U_R - RIGHT SIDE HEADING
V - 0.5 * LEG LENGTH
W - PROJECTED HEADING
X - TARGET HEADING
Y - 2 * TLE
Z - PLMULT * TLE / FORMATION LEG SEPARATION

FIG. 4B

Patent Application Publication

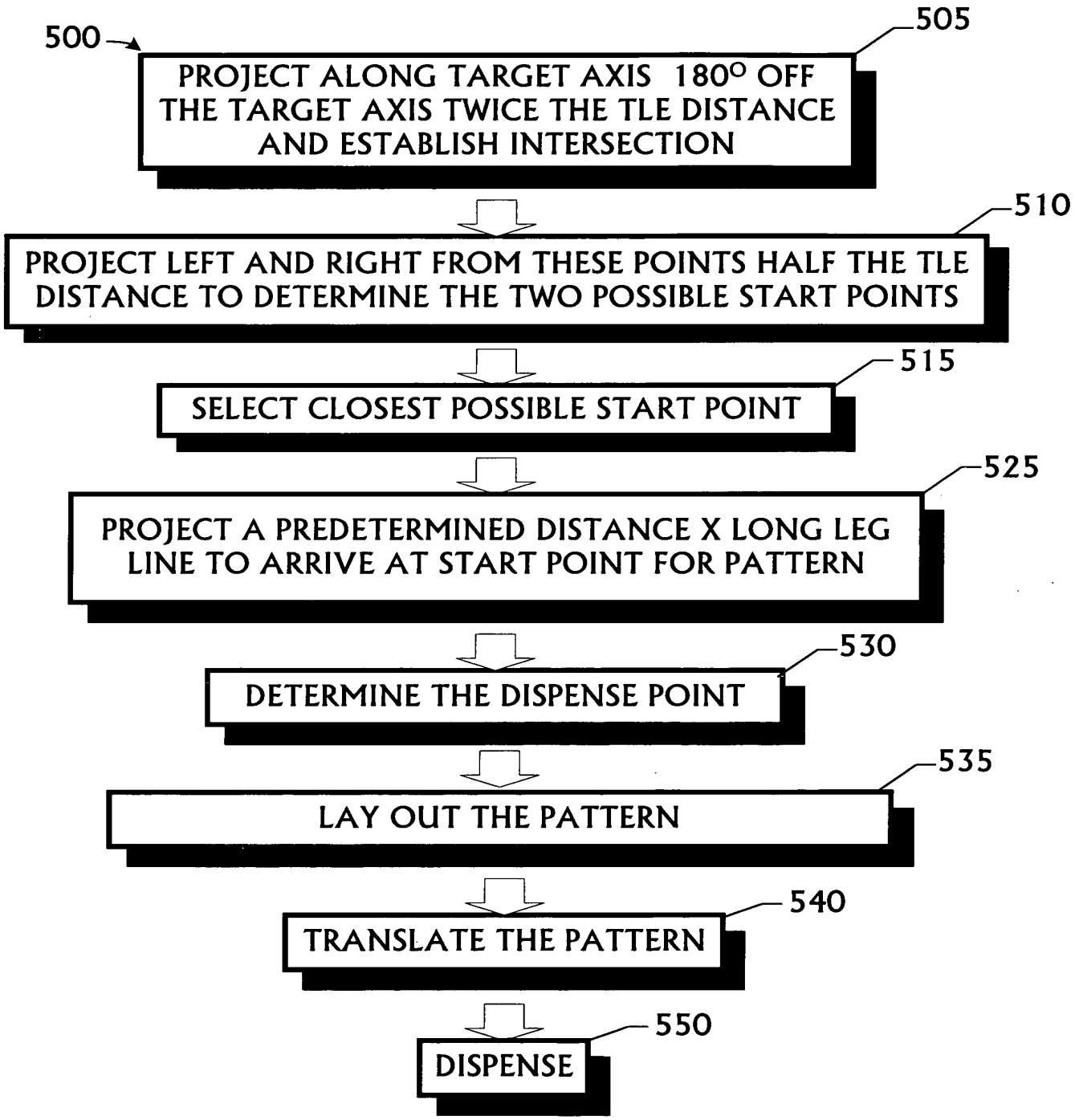

500
505
PROJECT ALONG TARGET AXIS 180° OFF THE TARGET AXIS TWICE THE TLE DISTANCE AND ESTABLISH INTERSECTION
510
PROJECT LEFT AND RIGHT FROM THESE POINTS HALF THE TLE DISTANCE TO DETERMINE THE TWO POSSIBLE START POINTS
515
SELECT CLOSEST POSSIBLE START POINT
525
PROJECT A PREDETERMINED DISTANCE X LONG LEG LINE TO ARRIVE AT START POINT FOR PATTERN
530
DETERMINE THE DISPENSE POINT
535
LAY OUT THE PATTERN
540
TRANSLATE THE PATTERN
550
DISPENSE

FIG. 5

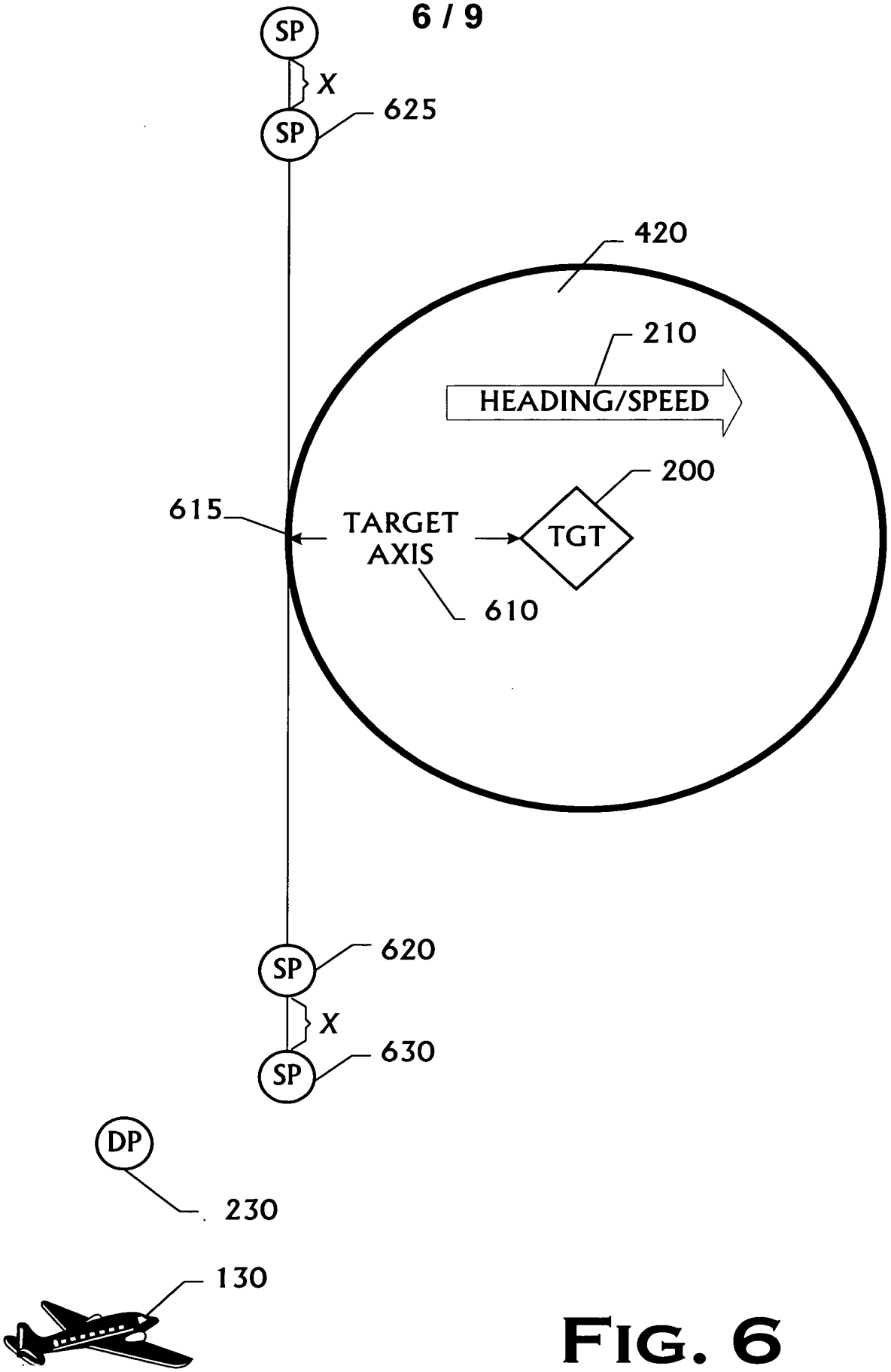

SP
X
625
SP
420
210
HEADING/SPEED
200
615
TARGET
AXIS
TGT
610
SP
620
X
SP
630
DP
230
130

FIG. 6

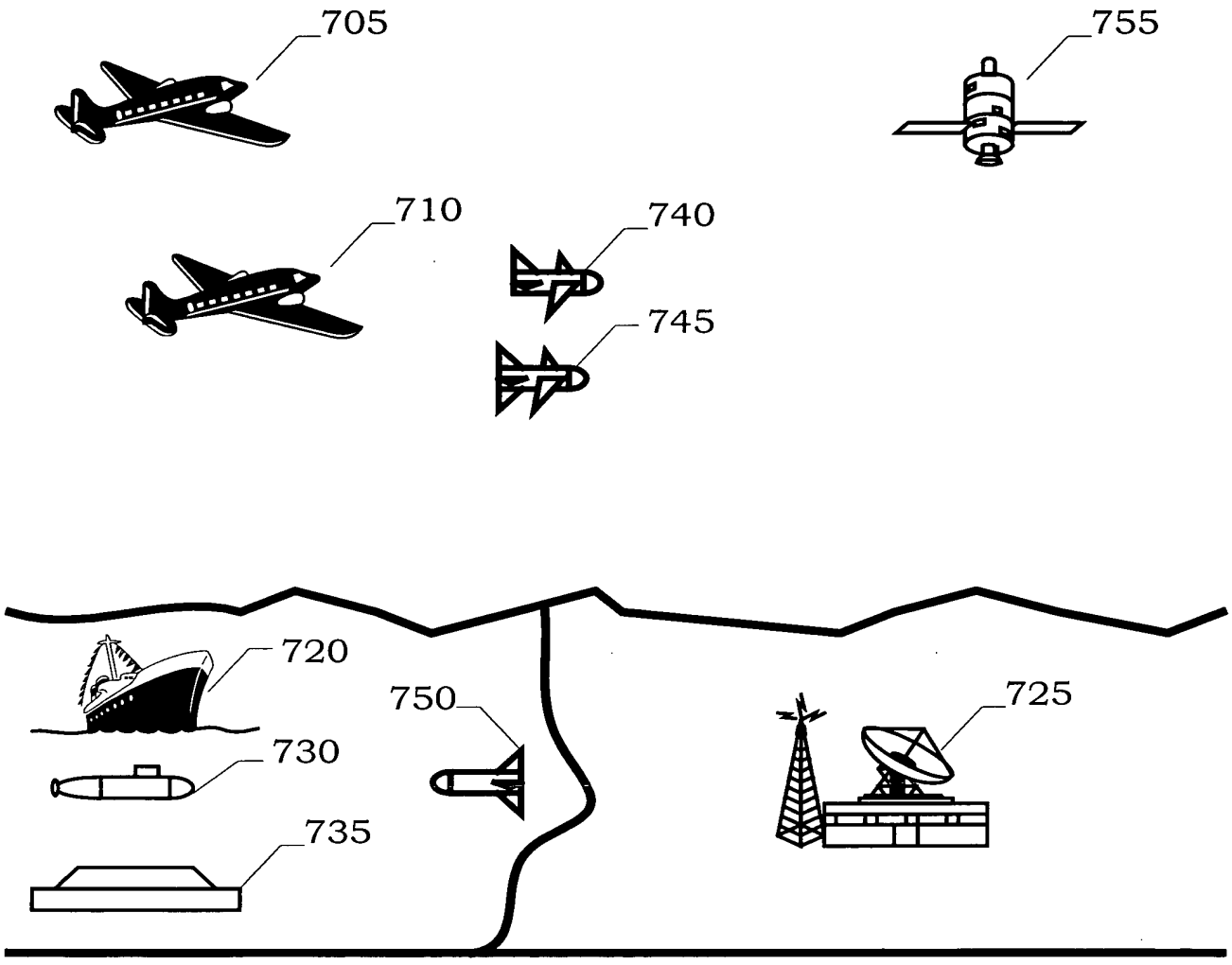


FIG. 7

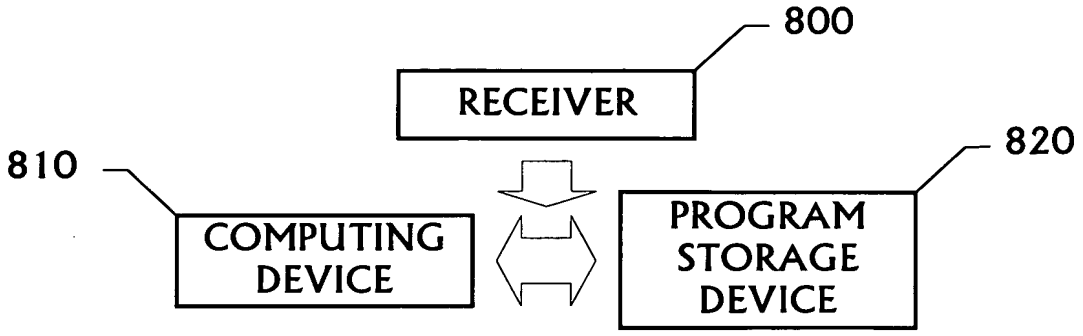


FIG. 8A

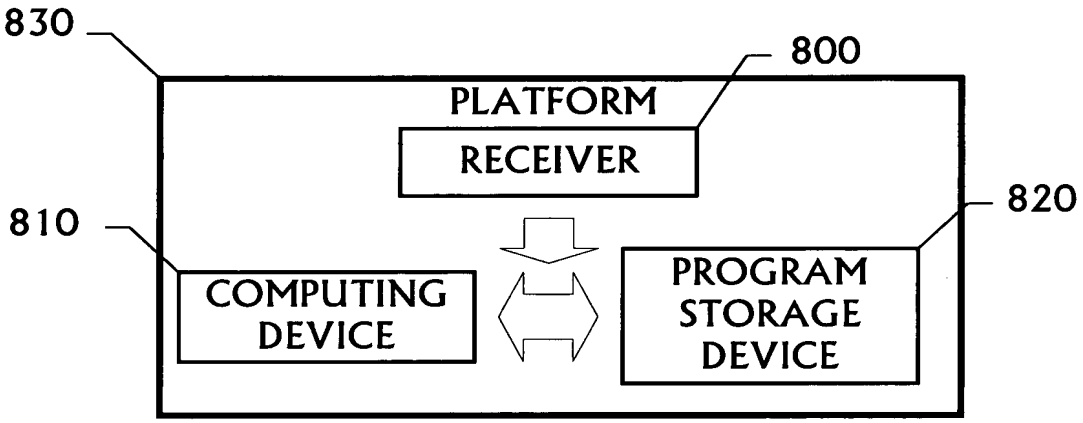


FIG. 8B

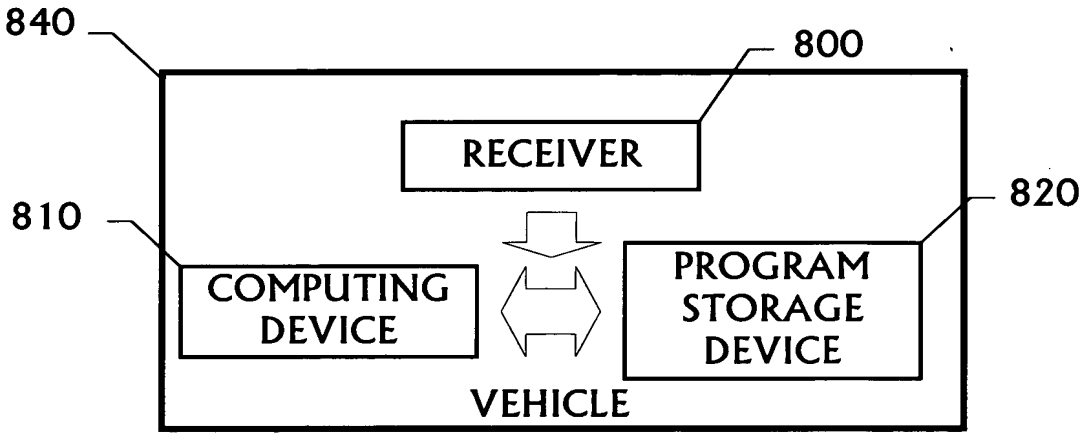


FIG. 8C

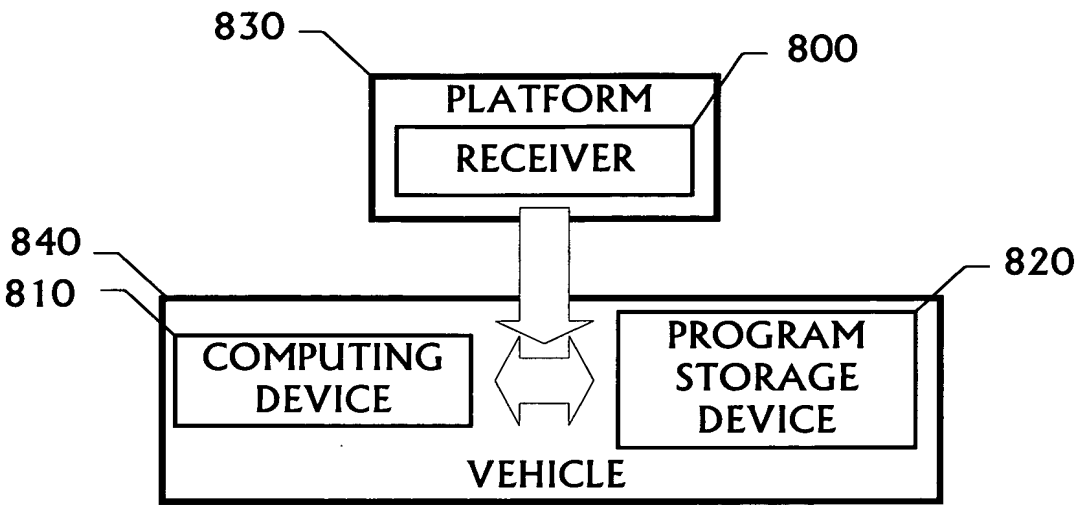

830
800
PLATFORM
RECEIVER
840
810
820
COMPUTING DEVICE
PROGRAM STORAGE DEVICE
VEHICLE

FIG. 8D

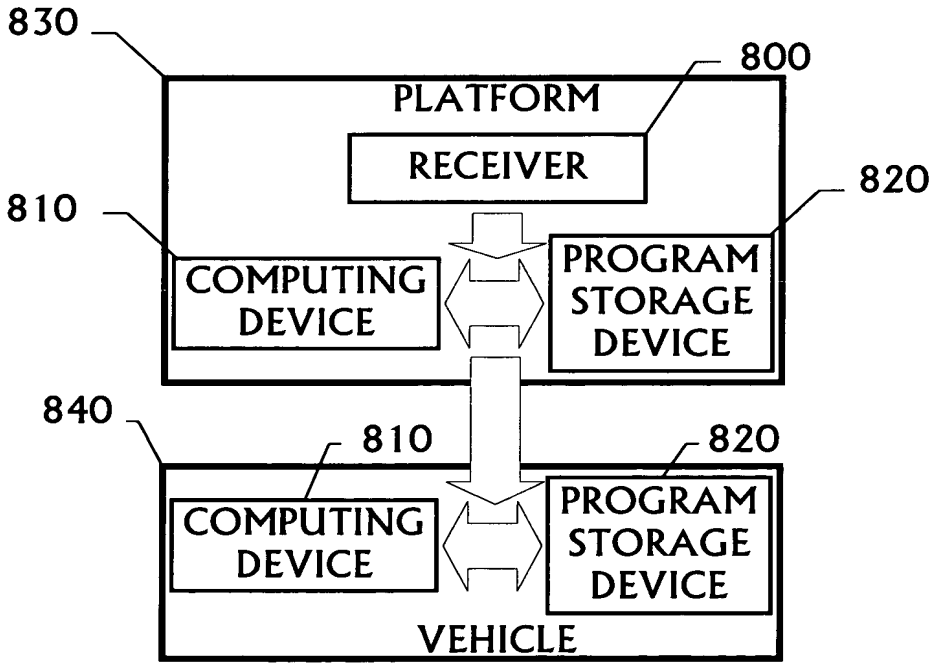

830
800
PLATFORM
RECEIVER
820
810
COMPUTING DEVICE
PROGRAM STORAGE DEVICE
840
810
820
COMPUTING DEVICE
PROGRAM STORAGE DEVICE
VEHICLE

FIG. 9